SURGERY OF LAPAROCELES: OUR EXPERIENCE USING SYNTHETIC PROSTHESIS

BIONDI A. MIGLIORE M. and BASILE F.
II DEPARTMENT OF EMERGENCY SURGERY – UNIVERSITY OF CATANIA (CHIEF PROF. F. BASILE)

INTRODUCTION: During the last 10-20 years, there has been an on-going increase in the utilization of prosthetic materials for surgical treatment of abdominal wall defects: this is to be attributed to the availability of synthetic polymers highly biocompatible. Thus a sharp improvement in postoperative results has been reported in the surgical treatment of large laparoceles, especially in terms of incidence relapse, gone from 14,5-48,7 % of techniques with direct suture to 1-18,5% .We currently retain that, in the presence of a laparocele, the principal indications for utilization of a prosthesis can be summed as follows: - laparocele relaps; - large laparoceles (hernial porta with a diameter 10 cm); - "marginal" laparoceles (subcostal, inguinal, soprapubic). We must stress than an "ideal"prosthesis does not exit as yet; however, if it did, it should have the following characteristics: biologically and chemically inert; easily moulded and elastic; resistant to infections; resistant to traction; radiotransparent; able to be incorporated to the fibroblastic reaction. **METHODS**: Between January 1990 and December 1998 we have treated 198 cases of laparocele performing surgical intervention with placement of prosthesis in all patients of this group. The prosthetic materials utilized were the following: polypropylene in 42 (21,21%) cases, dacron in 12 (6,06%) cases, vicryl in 4 (2,03%) cases and PTFE in 140 (70,7%) cases. In 78 patients the prosthesis was positioned in the preperitoneal location (39,39), in the remaining 120 (60,61) intraperitoneally placed. Concerning the total 140 prosthesis in PTFE, they were subdivided in the following: - 67 Soft Tissue Patch; - 48 Mycro-Mesh; - 15 Dual-Mesh; - 5 Mycro-Mesh PLUS; - 5 Dual-Mesh PLUS. A subcutaneos aspiration drainage was constantly left in-situ. **RESULTS**: Operative mortality was nil; immediate postoperative morbidity on the whole was 7,5% (15/198), as follow: - 5 superficial infections; - 4 deep infections; - 2 hematoma; - 4 seromas. Only in one case of deep infection it was necessary to remove the prosthesis. Patients follow up showed relapse in 3 cases (1,5%).

DISCUSSION and CONCLUSIONS: Separate analysis of the results achieved in patients with preperitoneal prosthesis and in patients with intraperitoneal prosthestis does not seem to reveal a substantial difference in terms of complications. In conclusion, based on our experience, we can safely state that, when ever it is possible to reconstruct the peritoneal layer, it is good practice to position the prosthesis in the preperitoneal location. In those cases where it is not possible to perform peritoneal plane reconstruction, the choice of PTFE-e prosthesis in the intraperitoneal location is clearly indicated.

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Gynaecologic Surgery

Case Report: Small cell carcinoma of the ovary: A case report of large cell variant

Davide De Vita, Lorenzo Aguzzoli, Alessandro Ferrari, Giovanni Gargano, Carmela Di Gregorio, Riccardo Rolli, Giuseppe Masellis

Department of Obstetrics and Department of Pathology , Carpi Hospital, Italy

An unusual case of large cell variant of ovarian small cell without hypercalcemia is reported. A 28 year old women (gravida 0) had a unilateral ovarian with sudden lower abdominal pains. Laparotomic adnexectomy was performed for ovarian torsion. Hystological response was designated "small cell carcinoma" of the ovary. The patient received chemotherapy postoperatively with PEB for 10 cycles and performed laparoscopy for a 2nd look after 6 months. The patient was asymptomatic with no evidence of disease 8 months after diagnosis. 10 month later the patient showed a rapid resumption of disease, with the clinical evidence of a large pelvic mass. Patient received pelvic stop-flow locoregional chemotherapy but 3 months later after the diagnose of a bladder infiltration of the disease she was submitted to surgery and was diagnosed a small cell ovarian carcinoma with liver metastasis. Patient died two months after last surgery for hydronefrosis The small cell carcinoma of the ovary in one thirds of cases is not associated with paraendocrine hypercalcemia. The serum calcium level, was normal before surgery and during recurrent disease period. Difficult was the differential diagnose of this tumour with other primary or metastatic undifferentiated neoplasia especially with granulosa cell tumor. The difficulty of the final diagnose of this uncommon case was done by the presence of large cell variant and by the absence of hypercalcemia.

LAPAROSCOPIC-ASSISTED VAGINAL HYSTERECTOMIES CONVERTED TO LAPAROTOMY: ANALYSIS OF FAILURES.

P.M. Cristoforoni, V. Remorgida, F.J. Montz and G.L. Capitanio†.

University of Genoa, Genoa and UCLA Medical Center, Los Angeles.

Introduction: Laparoscopically assisted vaginal hysterectomy (LAVH) is a procedure increasingly performed to reduce the number of abdominal hysterectomies. Clinical and economical advantages of the procedure have been underlined elsewhere. Objective of this study was the evaluation of occurrence and causation of aborted LAVHs at three Obstetrics and Gynecology training hospitals. Failures were defined as procedures requiring laparotomy.

Methods: The medical records of one hundred consecutive patients who underwent LAVH at UCLA Center for the Health Sciences, Olive View-UCLA Medical Center, and San Martino Hospital because of benign uterine pathology were retrospectively evaluated. Data collection and analysis included: age, weight, indications for surgery, past obstetrical and surgical history, concomitant procedures performed, post-operative diagnosis, peri-operative complications, operative time, estimated blood loss, uterine weight, and length of hospital stay. Univariate analysis of variance to assess statistical significance was performed when appropriate.

Results: Nine procedures (9%) were aborted and converted to abdominal hysterectomy. The most frequent reason for conversion (6 cases) was large uterine size with limited mobility and associated inability to adequately visualize the pelvic side wall structures. The other three procedures were aborted because of massive intraperitoneal adhesions (2), or intraoperative severe bleeding (1). The mean uterine weight of patients who required conversion to abdominal hysterectomy (575 g, range 387 to 1030 g) was significantly higher than that of the patients undergoing successful LAVH (230 g, range 35 to 612 g; $P < 0.03$).

Discussion and conclusions: In our series of 100 patients only once was a LAVH converted to an abdominal hysterectomy because of an intraoperative complication. A conversion rate lower than 10% may be appropriate so as to offer the potential benefits of the laparoscopically assisted vaginal approach to the largest number of patients who would otherwise undergo an abdominal hysterectomy.

AMOXICILLIN + CLAVULANIC ACID VS CEFAZOLIN IN GYNECOLOGIC SURGERY: A RANDOMIZED STUDY.

Authors: Franco DI FAZIO, Giovanni A. MELILLI, Rosanna ZACCARO, Annarosa PELLEGRINO, Giuseppe DI GESU', Antonella VIMERCATI, Mariateresa LAPRESA, Gennaro CORMIO.

Department of Obstetrics and Gynaecology, University of Bari.
Head Department: Prof. Luigi SELVAGGI.

Introduction: The aim of this pilot study was to compare the efficacy of antibiotic prophilaxis with amoxicillin + clavulanic acid versus cefazolin in gynecologic patients undergoing laparotomic surgery for benign pathologies.
Patients and methods: A prospective study was conducted at the Department of Obstetrics and Gynecology, University of Bari, between April and December 1998. The subjects eligible were all the clinic patients scheduled to undergo laparotomic surgery for gynecologic disease. Criteria for exclusion included anamnestic episodes of allergic reactions to penicillin/ cephalosporines, previous significant medical pathologies, infections or antibiotic treatment seven days before surgery and hepatic or renal failure. Patients were allocated to the two arms of this study according to a computer-generated randomisation table. In every arm they received ultra-shot term antibiotic prophylaxis (Group A amoxicillin + clavulanic acid 2,2 gr. i.v., Group B cefazolin 2 gr. i.v.) 30 minutes before induction of anaesthesia. Febrile morbidity as well as site-specific infections were carefully evaluateduntil discharge from the hospital.
Results: 134 patients were eligible for this study (Group A = 70, Group B = 64). Surgical procedures consisted of total abdominal hysterectomy with or without salpingo-oophorectomy (N = 114), bilateralsalpingo-oophorectomy (N = 10) and miomectomy (N = 10). Febrile morbidity occurred in one patient in Group B and in none of Group A, three patients showed urinary tract infections (Group A = 2; Group B = 1) and two patients in Group B presented abdominal wound infection. Overall two patients in Group A and five in Group B received antibiotic treatment.
Discussion and conclusions: The preliminary results of this study demonstrate ultra-shot term prophylaxis is safe and feasible in laparotomic gynaecologic surgery. A larger number of patients is necessary to confirm this preliminary data and to confirm the efficacy and cost-effectiveness of one of the two antibiotics.

Sonography and helical Computed Tomography in complicated pelvic inflammatory disease

Catalano O, Altei F, Sandomenico F, Esposito M, *Nunziata A, Siani A.
Department of Radiology, S.Maria delle Grazie Hospital,ASL Na2, Pozzuoli, Naples, Italy.
*Department of Radiology, PSI Napoli Est, ASL Na1, Naples, Italy.

Introduction. We report our experience in the assessment of complicated pelvic inflammatory disease (PID) stressing the value of helical Computed Tomography (CT).
Methods. In the last 3 years we evaluated 10 patients with complicated PID (30-52 years old, mean 41). Transabdominal sonography (US) and contrast-enhanced helical CT were performed in all, plain films in 2, large bowel enema in 1. Three patients were known for PID, 4 had complicated PID suspected clinically or sonographically, 3 were referred to CT study for US diagnosis of ovarian cyst or neoplasm, and for pelvic pain with negative US.
Results. In all cases the features of complicated PID were clear and specific: the close relationship with the internal genitals and specially with the posterior uterine wall demonstrated the pertinence of the collection, which was unilateral in 7 cases and bilateral in 3. The largest diameter ranged from 4 to 11 cm (mean 6). The shape was regular in 7 cases (round or oval) while in the remaining the collection adapted its shape to the pelvic spaces, dislocating and compressing the surrounding structures. Loculations and septa were recognizable in 6 collections while a clear thick wall with dense contrast-enhancement was evident in all. Internal density ranged from fluid to a higher and inhomogeneous attenuation (corpuscolated content). Free fluid in the cul-de-sac was found in 4 patients, pelvic fat inflammation with hazyness and ground-glass appearance in 5, omental thickening in 3. Three patients had ileal or sigmoid involvement. One was known to carry an ulcerative colitis and the US detection of a retrouterine collection had raised the suspicion of a colonic origin. Surgical drainage was performed in 5 cases with larger collections; 2 also required lysis of adhesions to ileal loops or sigmoid colon. Five recovered with antibiotic therapy.
Conclusions. Complicated PID is usually evaluated by means of history, physical examination, and US findings. Nevertheless the clinical or US features may be nonspecific or misliding. US is highly accurate in the proper clinical setting but in atypical cases it may suggest ovarian cyst, neoplasm, or chronic ectopic pregnancy; moreover US lacks of panoramicity and uncompletely depicts the disease extent. Helical CT allows accurate and panoramic evaluation of the collection, involvement of pelvic fat, and relationship with the surrounding structures. Multiphase assessment during contrast agent injection, image overlapping, and high-quality multiplanar recontruction are the points of strenght. CT provides additional information and is of special value for complex cases (entero-gynecologic relationships), improving the disease staging and treatment planning.

LAPAROSCOPIC APPENDICECTOMY IN FERTILE FEMALES

Monaco, S. Moscato, L. Gastaldi and M. Mansuino
ASL 5, Piemonte, Hospital of Giaveno, Division of General Surgery

The use of laparoscopy in the management of suspected appendicitis is not new. The accuracy of clinical diagnosis in patients with suspected acute appendicitis is around 70% and is less in women that men. Diagnostic laparoscopy allows the correct diagnosis to be reached in patients with suspected appendicitis, thus giving a better a better evaluation of the peritoneal cavity than is obtained by the standard open appendicectomy. The advantage allows the diagnosis of pelvic inflammatory and pelvic disease in young females who develop right iliac fossa pain. Besides, laparoscopic appendicectomy reduced postoperative pain, wound infection rate, hospital stay, and adhesion formation. However, most surgeons claim that open surgery is simple, expeditious, and effective (1). The purpose of this study is to compare laparoscopic with open surgery for appendicectomy. Between april 1995 and january 1999, 323 appendicectomies were performed: 275 (85,1%) open and 48 (14,9%) laparoscopic surgery. Fertile females were 157 (48,6%) in the open group and 34 (70,8%) in the laparoscopic group. Complication rate was 9% for open and 6,3% for laparoscopic procedure. The median anaesthesia and surgical time was, respectively, 48 (range 35-118) and 41 (range 18-102) min for open, and 54 (range 37-94) and 43 (range 21-82) min for laparoscopic appendectomy. The mean stay for open operation was 4,8 (range 2-28) days and for the laparoscopic route 2,1 (range 1-4) days. Pelvic disease was found and treated at the same time during 7 (4,5%) open and 8 (23,5%) laparoscopic procedures. These results suggest that laparoscopy is beneficial in young fertile females with lower abdominal pain. It provides an excellent view of the pelvic area, it provides both diagnostic and therapeutic capabilities (2). Besides, laparoscopic appendectomy is superior over open procedure regarding post-operative pain and complications.

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LAPAROSCOPIC TREATMENT OF OVARIAN MASS

RINALDO TIERI - ROSITA TORRINI
OSPEDALE "R.SILVESTRINI" - PERUGIA - ITALY
PRIMARIO PROF. UGO MERCATI

INTRODUCTION

The general definition of "ovarian cyst" includes several kinds of lesions, which can be grouped into two main categories: the ovarian dysplastic cysts, and the neoplastic forms, benign and malignant. Dysplastic cysts are divided into four main types: follicular cysts, luteinic cysts, polycystic ovary, and ovarian endometriosis. As regards the primitive tumours of the ovarium, mucous cystoadenoma, serous cystoadenoma and dermoid cyst occur in a cystic form and are the benign forms of serous cystoadenocarcinoma, mucous cystoadenocarcinoma, and malignant cystic teratoma , respectively. At present laparoscopy is the ideal approach for the treatment of benign forms and is very useful in the staging of malignant forms.

METHODS

We reported our experience in the treatment of benign ovarial and tubal mass. From january 1995 through december 1998, we operated by laparoscopy 33 patients with ovarian cysts and 2 patients with an extratubal pregnancy. Preoperatively we performed the following investigations:

- an ultrasound scan of the abdomen and the pelvis,
- a CT scan of the abdomen and the pelvis.

Patients aged over 35 underwent a cytosmear test as well. The patient was positioned supine while the surgeon standing on her left side. The monitor was positioned opposite the surgeon, on the patient's right.

A pneumoperitoneum and three trocars were introduced:

1. in the periumbelical region for optics;
2. on the right-hand McBurney's point (operating canal);
3. on the left-hand McBurney's point (grasping clamp).

At first a pelvic exploration was performed. We proceeded to the isolation of the cyst or the ovarium, by enucleoresection or ovariectomy using an endoscopic automatic suturing tool. The piece displacement was performed with a bag for extraction. A suction drainage was positioned in the pelvis and was removed on day 2. The operation lasted 40 minutes on average. In every case with a diagnostic doubt, even the slightest (8 cases), we performed an extemporary histologic scan which has always confirmed the benign nature of the lesion. The postoperative course was very satisfying for all the patients, who began re-feeding themselves on day 1 and were dis charged on day 3. The postoperative pain was almost completely absent and the mobilization was all but immediate. In 5 cases with enucleoresection we kept the drainage until days 4-5 due to persistent bleeding, even though of little importance (<70 cc/die).

CONCLUSION

Nowadays the elective treatment of ovarian cysts is the laparoscopic treatment on account of its reduced postoperative pain, the prompt functional recovery and the aesthetic result of the surgical scars. However, it is essential to perform preoperatively all those investigations which can grant the benign nature of the lesion with a satisfactory margin of safety.

ABDOMINAL SACRAL COLPOPEXY WITH PROLENE MESH

Massimo Diana, Manlio Schettini, Michele Gallucci
Dept. of Urology - "Cristo Re" Hospital - Rome - Italy

INTRODUCTION. Surgical methods for the correction of the prolapse are through the vaginal route with the suspension of the vaginal vault to sacrospinous ligament or through the abdominal aprroach that allows the fulfilment of several techniques of colpopexies. We report our experience of abdominal colpopexy (CSP) with a prolene mesh in women with vaginal vault prolapse.

MATERIALS AND METHODS. From 1994 to 1997 we operated for CSP 15 patients (mean age of 57 years) with severe prolapse of the vaginal vault; 8 of them had concomitant uterine prolapse. 7 patients had previous hysterectomy. All patients have been evaluated by means of an accurate anamnesis and clinical pelvis examination with Q-Tip test and Manoeuvre of Bonney, a retrograde and voiding cystourethrography and a complete urodynamic test. A simple hysterectomy is performed when a uterine prolapse coexisted otherwise in patients who had hysterectomy, isolation of the vaginal stump was undertaken. A retroperitoneal tunnel was then created along the right branch of the small pelvis to isolate the anterior surface of the sacrum. Between the vaginal "cul de sac" and the front wall of the sacrum a mesh of prolene has been anchored without any traction. The prolene mesh was retroperitonealized. In 6 cases with associated urethral hypermobility, a colposuspension has been performed according to Burch.

RESULTS. All patients had an indwelling urethral Foley catheter for 4-12 days. All the prolapse had been cured with a good high positioning of the vaginal vault. All 11 patients who were sexually active were able to have normal sexual intercourse again. No recurrent prolapse or infection or rejections of the prostheses have been observed. In one patient pollakiuria unresponsive to anticholinergics had persisted.

DISCUSSION. Our experience confirms the good results of this technique in the treatment of the total prolapse of the vaginal dome. The technique we propsed restores the vaginal statics, thanks to a solid and strong material like the prolene mesh that can also provide lenght and thanks to the fixation in a tissue as solid as.

LAPAROSCOPIC CHOLECISTECTOMY DURING PREGNANCY

MUTO C.M.M., VERRENGIA G., LILLO S., ESPOSITO L., MASSA G., GALARDO R., SCARPELLI M., PALMIERI S., MAURIELLO V., COSTABILE M., SCHIAVONE V.

CLINICA "PINETA GRANDE" - CASTEL VOLTURNO (CASERTA) - ITALY

VIDEO-SURGICAL OPERATIVE UNIT

Laparoscopy represent new element to approaching abdominal surgery, and it is the "Gold Standard" about surgical treatment of lithiasis of biliary tract about economic benefits e about the rapid patients "restitutio ad integrum". This aspect is more important to operate cholecistectomy during pregnancy. We know that abdominal surgery increase the risk of miscarriage or prematur labor. Also, exposure of the fetus to potential toxic agent like anesthetics and analgesics can cause harm. Particular laparoscopic risks are caused by pneumoperitoneum and the insertion of Veress needle and trocars. In our structure, accorded with italian N.S.S., we operated for laparoscopic cholecistetomy a 30 years woman 12 weeks pregnant. She had lithiasis of gallbladder with frequent and strong biliary pain. The patient, informed, made pre-operative routine exams. The operation went performed with operating table tilted 30° to left side (to remove uterus from inferior cava vein) and we used less antiTrendelemburg position with slowly 10 mmHg pneumoperitoneum. Patient were incruently monitoring using saturimetry and capnoghaph machine for monitoring CO2 level. During all 30 minutes of operation, all vital parametroes were normal end at the end of operation we did't have any anaesthetics problems. We made pneumoperitoneum before, and we used a Direct Vision Initial Port (VisiPort) to enter in abdominal cavity. After complete abdominal exploration we introduced other trocars under laparoscope wiew. We did't have any surgical problems. The woman was discharged the 2° post-operative day after complete abstetrics echography.

Medial septal-fasciocutaneous tigh flap after radical vulvectomy in advanced vulvar cancer

Manci N*, Lentini A°, Cutillo G*, Maneschi F*, Congiu M*,Amoroso MA*, Casalino B*, Persichetti P° and Benedetti Panici P*.
** Dpt. Gynecology and °Dpt. Plastic Surgery, Free University Campus Bio-Medico, Rome, Italy*

Surgical treatment of locally advanced vulvar carcer is followed by wide tissue loss. In order to restore an acceptable anatomy of the genital area and prevent wound complications (infection and deiscence) reconstructive procedures are now available and widely performed. The goal of the whole surgical treatment is to obtain a radical excision of the neoplasm and restore urethral, vaginal, and anal structures as close as possible to the normal anatomy.
Surgery consisted of radical vulvectomy and bilateral inguinal lymphadenectomy with separated incision.
Reconstructive procedure consisted of a medial septal-cutaneous tigh flap in V-Y shape carried out mediately after radical surgery.
Fifteen patients affected by locally advanced vulvar cancer (FIGO 2-4) have been treated since december 1996 up to december 1998. Age ranged between 55 and 83 years and the BMI ranged between 18 and 41. Radical surgical treatment was performed followed by reconstructive treatment within the same operative time.
Flaps operative time ranged between 50 and 360 minutes; four Redon drainage were left in place. Median blood loss was of 200 ml. Postoperative outcome showed a median of 11 postoperative hospitalization days. Major complications included 2 partial cutaneous flaps deiscences, 5 cases of lymphedema, one case of fever over 38°C and 3 urinary infections. Global surgical outcome can be considered absolutely satisfactory.
We believe radical surgery for vulvar cancer has to be followed by surgical reconstruction. Combined procedure in fact reduces morbidity, the risk of infection, post-operative hospitalization and patients surgical stress and offers a good functional and aesthetic result. Such scheduled procedure allows the patient to obtain the best quality of life after radical surgical treatment.

Preliminary report on the Tension-free Vaginal Tape (TVT) for treatment of female urinary incontinence.

Zullo MA, Casalino B, Congiu M, Manci N, Cutillo G, Amoroso MA, Maneschi F and Benedetti Panici P.
Dpt. Gynecology, Free University Campus Bio-Medico, Rome, Italy

Nowadays the gold standard treatment for urinary incontinence is represented by Burch colposuspension. Although the results of this surgical procedure have shown good results (75% cure rate after 10 yrs), some important problems have been identified. The aim of the present study is to examine the effectiveness and the morbidity of a less invasive technique known as TVT for the treatment of female urinary incontinence. From March 1998 to January 1999, 15 pts with genuine stress incontinence underwent a non randomized prospective study of the TVT procedure. Patients had a median age of 59 yrs (range 50-64) and a median parity of 2 (range 2-4) respectively. All women underwent preoperative assessments including VAS symptoms, pelvic examination, stress test, Q-tip test and full urodynamic evaluation. The instrument and surgical procedure were exactly the same as descripted by Ulmsten. No postoperative catheterization was performed routinely and patients were discharged from the hospital once the postvoid residual was <20% of that from self-voiding consecutively two times.
Follow-up visits were scheduled at 1 and 6 months postoperatively. Median operating time was 18 min (range 16-25) and no intraoperative complication occured. Two patients needed intermittent catheterization, all women were discharged on the morning of the next day. No patient was missed at follow-up.
All patients (100%) were subjectively and objectively cured at 1 and 6 months. Particularly the improvement in quality of life of all subjects, the reduction of vesico-urethral mobility, the increase of urethral resistance (Maximal Urethral Closure Pressure and Functional Length) resulted statistically significant. No evidence of defect healing in the vaginal wound or rejection of the prolene tape occured. One patient had a urinary tract infection and another one had a small subcutaneous oematoma in suvrapubic area. No patient had voiding difficulty, postvoid residual or urgency symptoms.
Although the short follow-up period, TVT procedure seems to be a safe and effective procedure for the correction of genuine stress urinary incontinence.

CONCOMITANT CHEMO-RADIOTHERAPY FOLLOWED BY RADICAL SURGERY IN LOCALLY ADVANCED CERVICAL CANCER.

Congiu M, Manci N, Casalino B, Amoroso MA, Cutillo G, Maneschi F, Benedetti Panici P.
Dpt. Gynecology, Free University Campus Biomedico, Rome, Italy.

Encouraging results have been observed with concomitant chemo-radiotherapy in the treatment of advanced epidermoidal cancers, namely anus and head- neck tumors. In cervical cancer a therapeutic benefit has not been proved yet, but preliminary results seem to show the superiority of chemo-radio integration in comparison with the exclusive use of radiotherapy. On the basis of these observations a prospective study has been carried out in order to evaluate the feasibility and the efficacy of concomitant radio-chemotherapy followed by radical surgery in patients affected by locally advanced cancer of uterine cervix. Since March 1996, 25 patients entered this study. The following criteria of eligibility were adopted: histologically verified epidermoidal cervical cancer, stages FIGO IB2, IIA>4 cm, IIB,III, abscence of any previous treatment and informed consent.. During the first and the last week of radiotherapy patients were submitted to chemotherapy containing 5- fluorouracile (5-FU) and cisplatin (P) according to the following scheme: 5 FU 1000 mg/m2, e.v. in continuous infusion for 96 h, g. 1-4;P 20 mg/m2, e.v., g 1-4. At the end of concomitant radio-chemotherapy, patients judged operable were submitted to radical hysterectomy- and systematic aortic and pelvic lymphoadenectomy. All but two patients underwent radical surgery. In one patient the surgical treatment was not carried out because of the appearance of an acute poliradicoloneurite of Guillon- Barrè at the end of the radio-chemotherapy. In the second one intraperitoneal spread at explorative laparatomy was found. The surgical treatment consisted in type III radical hysterectomy in 3 cases, type IV in 12 cases, type V in 3 cases and anterior pelvectomy in 1 case. In all patients a systematic pelvic and aortic lymphoadenectomy was performed. Early postoperative complications were observed in 10 patients:: concomitant pubic, vulvar and leg lymphoedema in 8 patients, bowel perforation and total urinary incontinence in one patient each, respectively. Late postoperative complications consisted in laparocele (1 patient) and uteral fistula (1 patient) After a median follow-up time of 14 months (range 1-21) no recurrenceshave been observed.
The preliminary results of the study seem to suggest a high therapeutic potential of the concomitant combination of radio-chemiotherapy and radical surgery, thus providing the basis for a successive trial of phase III.

RECONSTRUCTIVE SURGERY IN GYNAECOLOGIC ONCOLOGY

Gennaro CORMIO, Ambrogio CAZZOLLA, Lucia GIANNELLI, Maria MASTROIANNI, Luigi P. IMPEDOVO, Annamaria PARISI, Francesca IERARDI, Giovanni A. MELILLI.

Department of Obstetrics and Gynaecology, University of Bari.
Head Department: Prof. Luigi SELVAGGI.

Introduction: Numerous reconstructive surgical procedures have been developed during the last years in order to allow wide excisions or to prevent major complications in patients undergoing radical demolitive operations. The aim of the present study was to evaluate our experience on reconstructive surgery in gynaecologic oncology.

Patients and methods: A retrospective chart review was conducted on 357 major surgical procedures performed between 1990 and 1998 at the Gynaecologic Oncology Unit of the II Department of Obstetrics and Gynaecology, University of Bari. Mean operative time, blood loss, length of hospital stay, early and late complications and outcome in those patients who received a reconstructive procedure were recorded.

Results: Overall 50 reconstructive procedures were performed: 26 skin flaps reconstruction of the perineal defect after radical vulvar surgery, 14 corrections of laparocele, 8 omental flap transposition in patients submitted to exenterative surgery after previous radiotherapy, 2 transposition of a muscolocutaneous flap from the tensor fascia lata to cover wide groin defects. No operative death was recorded and serious complications occurred in 5 patients (10%).

Discussion and conclusions: The wide variety of reconstructive surgical procedures and the advances of surgical techniques and new synthetic matherials allow to perform safely major reconstructive operations. The proper indication, however, of each procedures has still to be clarified.

Electroradiosurgical excision procedure in the treatment of cervical intraepithelial neoplasia

D. De Vita, L. Aguzzoli, A. Ferrari, G. Gargano, R. Rolli, G. Masellis
Department of Obstetric and Gynaecology, Hospital of Carpi (MO)

Cervical intraepithelial neoplasia (CIN) is an increasingly disease in Europe and USA mainly affecting young women that want to preserve fertility. The use of recently introduced electroradiosurgical cervical excision obtained brilliant results with low complications and little thermal injury on specimen. Electroradiosurgical cervical excision has been performed in 65 patients affected by cervical intraepithelial neoplasia (CIN) of various stages. This non traumatic method uses 3.8 MHz radio waves to cut and/or coagulate without postoperative pain and tissue distruction. The radiosurgical excision has been performed in local anesthesia by a loop electrode or microneedle according to the seat of the lesion. The therapy was effective in 96.9% of cases (63/65) whereas the incomplete excision of CIN was observed in 7.7% (5/65). Complications (postoperative and late bleeding) occurred in 4.6% of the patients (3/65). Therefore, the electroradiosurgical excision procedure (EREP) can be considered an easy technique in ambulatory surgery; this method is effective in the treatment of CIN with either therapeutic and economic advantages and guarantee the functional and anatomic integrity of the cervix.

Interventistic Radiology

CT guided neurolytic percutaneous coeliac plexus block for treatment of cancer pain: preliminary results.

Pusceddu C.*, Mameli S.§, Tedde A.** and Podda G.*

* Servizio di Radiologia Ospedale oncologico di Cagliari (Italy)
** Divisione di Oncologia Medica Ospedale oncologico di Cagliari (Italy)
§ Servizio di Anestesia e Rianimazione, Cagliari (Italy)

Introduction. Percutaneous coeliac plexus neurolysis with CT-scan guided is a consolidated method to relieve pain in the patients with intractable upper abdominal cancer. This tecnique has been used not only for the treatment of the cancer pain, but also for the treatment of other chronic nonmalignant abdominal conditions such as chronic pancreatitis. To avoid general anestesia and to reduce the backward pain sometimes reported after neurolysis, we prefered to give local analgesia across a peridural catheter. Authors report the preliminary risults obteined in 9 patients.

Methods. From December 96 to June 98 were performed 9 CT-guided percutaneous coeliac plexus neurolysis including 5 men and 4 women with advanced abdominal malignancies (6 pancreatic carcinoma, 1 gallbladder, 1 duodenal and 1 hepatic carcinoma). The patients were affected by very intense pain contollable only with high dose of analgesics narcotics. Befor neurolysis a catheter was installed in the peridural space betwen L1-D12. To relief the pain caused by the diffusion of alcohol in the coeliac plexus, 50 ml of marcaine 0,5% without epinephrine were ijected. This tecnique require a posterior percutaneous transcrural approach. CT-scan guided, to determine the position of the needle tips and the spread of neurolytic solution. Different concentration of alcohol as ben used: the first 3 patients received 50 ml of a solution composed by 40 ml of 50% ethyl alcohol + 7 ml of 0.5% marcaine + 3 ml of contrast medium; the last 6 patients received 40 ml of 96% ethyl alcohol + 7 ml of 0.5% marcaine + 3 ml contrast medium. The distribution of solution all arround the origin of the coeliac trunk's is considered a very important step. Two cases have required the introdution of a second needle. To evaluate the rate of the analgesia relief, a visual analogue pain score (VAS) was used before and 48 hours after the neurolysis.

Result. The insertion of the needle and the spreed of the neurolitic solution was always successfull. All patients were painless throughout the operation and the local anestesia was able to control the pain done by the lysis. The pain relief was almost complete in patients treated with 96% ethyl alcohol. In two cases the peridural catheter was pulled out 48 ours after neurolysis.

Discussion end conclusion. The transcutaneal neurolysis of the coeliac plexus is useful to relief the pain in patients affected by cancer arised in superior abdomen. The CT-scan guide allowed a omogeneous distrubution of the contrast medium.
The insertion of the peridural catheter made a complete analgesia and reduced the incidence of complications.
Our method provided an excellent control of the pain in all patients. The analgesia was complet in patients treated with 96% ethyl alcohol solution (VAS score decreased from eight to one 48 ours after the treatment). The pain relief was not satisfactory in patients treated with 50% ethyl alcohol solution. In this case WAS score decreased from eight to four.

ENDOVASCULAR GRAFTS IN THE TREATMENT OF VASCULAR LESIONS OF THE UPPER EXTREMITIES

G.A. Giordano *, A. Tozzi *, R. Ramacci *, E. Serrao *, A. Florenzi ***, C. Cavalletti **
*Unità Operativa di Chirurgia Vascolare;
** Unità Operativa di Radiologia;
*** Unità Operativa di Anestesia e Rianimazione.
S. Filippo Neri Hospital, Rome - Italy

Introduction. Surgical repair of vascular lesions of the upper extremities has been well refined in last years, but endovascular procedures represent actually a valide alternative to open surgery. We report the results of our experience in some lesions of the subclavian and omeral arteries that we decided to treat by means of endovascular grafts.

Materials and methods. Four patients, three women and a young man, underwent to our observation for some vascular lesions of the upper extremities. Out of the three women, one had a sacciform atherosclerotic aneurysm of the left subclavian artery, an other one had a iatrogenic artero-venous fistula after needle catheterization of the left subclavian artery, and the last one a pseudoaneurysm of the left omeral artery developed after a penetrating trauma.The young man had an injury of the right subclavian artery, consequent to a close trauma of the uppper extremity. All the lesions were treated, in operating room, by means of endovascular grafts (Passager ^{TM}), through a percoutaneous access to an omolateral more distal vessel.

Results. All the procedures had intraoperative angiographic controls, which demonstrated their immediate succesful. There were no complications related to the procedures. Late controls, with clinical and strumental investigations (echodoppler), demonstrated the complete resolution of the lesions, and the patency of the vessels.

Discussion. Vascular lesions of the upper extremities may have a variety of causes. In our patients they were atherosclerotic, as the aneurysm of the subclavian artery, traumatic and post-traumatic as the section of the subclavian artery and the pseudoaneurysm of the omeral artery, and iatrogenic as artero-venous fistula of the subclavian artery. The treatment of the lesions occurring in a more proximal vessel is mandatory. Surgical repair may be complicated, expecially in post-traumatic lesions of a vessel within the torax, and require claviculectomy, sternotomy or thoracotomy. Furthermore, brachial plexus injuries, pulmonary contusions and bony fractures may add other causes of morbidity. Endovascular grafts have the advantage to perform the repair through a remote access, so reducing morbidity and mortality related to surgical access to the vessels.

Conclusions. Endovascular procedures extend the possibilities of treatment of vascular lesions of the upper extremities. Even though long term results are not yet known, we think they can employed also in traumatic injuries in youngs, when urgent intervention is required for life-treatening hemorrage.

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Exclusion of abdominal aortic aneurysms by endoluminal graft. Associated procedures to enlarge indications.

Platone A., Mascellari L., Di Crisci D., Dompè G., Falappa PG.*, Lo Scudo L.
*II Division of Vascular Surgery and *Department of Radiology*
IDI Hospital, Rome - Italy

BACKGROUND. Endovascular exclusion of infrarenal abdominal aortic aneurysm (AAA) with endograft is wide accepted as a sure and efficacious procedure in about 30% of cases. In some cases the use of associated procedures (PTA, brachio-femoral catheterism, hypogastric embolization, aortic or iliac cuff) allows to enlarge indication for endovascular grafting (EVG) in more complex cases. METHODS. Twenty-seven patients affected by AAA underwent EVG for the treatment of AAA between January 1997 and December 1998; 27 of 28 patients (1 immediate conversion to open repair) were successfully implanted with tube (3) and bifurcated (24) endografts. In 14 cases (51.8%) 21 associated procedures were necessary. 5 hypogastric embolization were done to prevent endoleak when one of the endograft limb was positioned in the external iliac artery. 3 iliac PTAs to dilate iliac stenoses, 6 brachio-femoral catheterism to facilitate the insertion of the controlateral limb and 7 adjunctive iliac cuffs. RESULTS. No intraoperative or postoperative complications were observed in the 27 patients. Associated procedures caused prolongation of time of intervention and exposition to radiation. In 1 case who had hypogastric embolization, at one year from intervention not related to associated procedure occlusion of the right iliac branch of the endograft occurred and a femoro-femoral crosse over bypass was necessary. CONCLUSIONS. In our experience associated procedures did not increased the morbidity and mortality of EVG. Interventions with associated or adjunctive procedures have a greater cost due to use of more materials, but allow the use of EVG in patients with not ideal general or local conditions that should be treated with open traditional surgery.

TRANSJUGULAR INTRAHEPATIC PORTOSYSTEMIC SHUNT (TIPS) AS A BRIDGE TO ORTHOTOPIC LIVER TRANSPLANTATION: A PERSONAL EXPERIENCE.

Della Pietra F., Di Nicuolo A., Casciaro G., Rossi M., Speziale A., R. Cortesini.
II Clinica Chirurgica, Servizio Trapianti d'Organo, Policlinico Umberto I - Roma

The transjugular intrahepatic portosystemic shunt (TIPS) is an interventional treatent resulting in decompression of the portal system by creation of a side-to-side portosystemic anastomosis.

In our center 85 TIPS have been performed in 71 men and 14 wemen (mean age 47, 82 years) until January 31, 1999.

The patients who underwent TIPS procedure were affected by: Budd-Chiari Syndrome (1 case), cystic fibrosis (3 cases), alcoholic cirrhosis (4 cases), primary biliary cirrhosis (1 case), post-hepatitis B cirrhosis (24 cases), post hepatitis C cirrhois (24 cases), post-hepatitis B and C cirrhosis (14 cases), idiopathic congenital fibrosis (4 cases), Wilson desease (1 case), hepatocellular carcinoma with cirrhosis (9 cases); according to the Child-Pugh classification, 51 patients were in class B, 3 in class A and 31 in class C.

TIPS was performed in 51 patients with refractory ascites to the medical treatment (60%), in 9 cases (10,5 %) for acute bleeding refractory to endoscopic and medical theraphy and in 25 patients (29,4 %) as a prophilaxis of rebleeding and congestive gastropathy.

Complications related to the procedure were death of 4 Child class patients for progressive liver failure three weeks later waiting for a liver transplantation and a iatrogenic rupture of the anonimus trunk .

56 patients underwent liver transplantation (31 in B class of Chil-Pugh and 26 in C class) after a mean time of 78,35 days (12 h-12 mo).

After hepatectomy for OLT 2 cases had a trombosys and in 2 cases the stent was dislocated in suprahepatic veins.

During the follow-up patients underwent monitoring by echocolor doppler flow mapping, esophagogastroduodenoscopy and angiography with pressure measurement.

Our experience demonstrated that patients who underwent TIPS procedure have statistically not significant differences in terms of operative time, and blood products infusion during OLT.We use now the TIPS as a "Bridge to transplantation". The objective of TIPS treatment is to prolong the patient's waiting time to tranplantation.

PTA-Stenting of internal carotid artery stenosis: early experience

Grossi R., Zaccaria A., Giannoni M.F., Panico M.A., Battocchio C., Sbarigia E.
I Cattedra Chirurgia Vascolare Policlinico "Umberto I" Roma
Direttore: Prof. Paolo Fiorani

Purpose: Over the years carotid-artery surgery has proved its efficacy in preventing cerebral ischemic events due to steno-occlusive lesions arising in the extracranial carotid artery territories. But the notable advances in the past decade now make endovascular treatment a valid alternative to open surgery in selected patients, especially those at high surgical risk.
This study was designed to assess the effectiveness of endovascular procedures in treating carotid-artery lesions and preventing neurologic events.
Method : From January 1997 to December 1998, from among the 257 patients who had extracranial carotid-artery stenosis amenable to surgical treatment 17 were selected for endovascular therapy (18 procedures). All patients had internal carotid-artery lesions measuring less than 2 cm in length, with 50 to 99% stenosis; 15 were primary lesions and 3 restenosis. In 53% of the patients lesions were symptomatic (8 TIA, 1 stroke). All procedures took place in the operating theater during cerebral monitoring by transcranial Doppler ultrasonography. In 15 patients endoprostheses were advanced through the femoral artery and in 3 via the carotid artery. All procedures involved "primary stenting". All patients received anticoagulant therapy during the procedure and preoperative and postoperative antiplatelet aggregating therapy. The average follow-up lasted 8 months (range 1 to 24 months).
Results: None of the 18 procedures led to immediate death. A laterocervical hematoma and a perioperative TIA accounted for a morbidity rate of 11%. Follow-up showed no failures in terms of immediate or long-term patency. In two patients (11%) slight myointimal hyperplasia developed without causing hemodynamically important stenosis (mean blood-flow velocity <50 cm/sec). No procedure led to death and none of the patients suffered neurological events.
Conclusions: Though limited, these encouraging results (0% mortality and 5% morbidity – 1 TIA and no strokes) seem to argue in favor of endoluminal stents as a valid alternative to surgical repair for occlusive disease of the extracranial carotid arteries. The few patients treated, the extremely selective indications and most importantly, the relatively short follow-up, preclude more definitive conclusions.

Evolution of the aortic morphology after endovascular exclusion of abdominal aortic aneurysms.

Mascellari L., Platone A., Di Crisci D., Dompè G., Cattaruzza M.S.*, Falappa PG.*, Lo Scudo L.
*II Division of Vascular Surgery, *Epidemiology Unit, **Department of Radiology IDI Hospital, Rome - Italy*

BACKGROUND. Some preliminary studies have shown the enlargement of one or both aortic necks after endovascular repair of infrarenal abdominal aortic aneurysm (AAA). Other reports have demonstrated the decrease of aneurysmatic sac diameter after complete endovascular exclusion of AAA. The aim of this study is to evaluate the changes in the size and morphology of the aorta at several levels after endovascular exclusion of AAA. METHODS. Twenty-eight patients affected by AAA underwent endovascular grafting for the treatment of AAA between January 1997 and December 1998; 27 patients were successfully implanted with tube (3) and bifurcated (24) endografts (1 immediate conversion to open repair) and were available for follow-up. A morphometric analysis of infrarenal aortic neck size and of aneurysmatic sac was undertaken with spiral computed tomography at intervals of 6, 12, 18 and 24 months after treatment. Changes in diameter of proximal neck were defined and the data were correlated with aneurysm size change, endograft diameter, attachment system fractures, and initial preimplant neck size. RESULTS. The mean follow-up time was 13 months. Significant proximal aortic neck enlargement was observed for at least 12 months after AAA repair. The mean dilation rates of the proximal aortic neck were 1.70 +/- 1.4. mm (median: 1.5 mm) at 6 months ($P < 0.00005$) and 1.8 +/- 1.1 mm (median: 1.75 mm) at 12 months ($P < 0.00005$). The aneurysm sac maximum diameter decreased by 3.58 +/- 4.35 mm. (median: 2.5 mm) at 6 months (P=0.00067) and 5.07 +/- 4.54 mm. (median: 5 mm) at 12 months (P=0.001095). The shrinkage of the aneurysmatic sac was observed in 7 pts (27%). Expansion rates of proximal neck did not have a statistically significant correlation with initial neck size, endograft dimensions, aneurysm size change, presence of endoleak, or attachment system fracture. CONCLUSIONS. In our experience aortic neck enlargement was observed for at least 1 year after endovascular exclusion of AAA; some investigators have suggested that this may be a transient effect, continued dilation at the endograft attachment site. On the other hand complete exclusion of AAA is associated with the reduction of aneurysm size and the shrinkage of aneurysmatyc sac. The clinical significance of these findings is unclear. Whether expansion of the proximal aortic neck and reduction of the aneurysm size may affect the attachment of endografts remains to be demonstrated with further long-term follow-up studies.

INFRARENAL AORTIC ANEURYSMS: ENDOVASCULAR PLACEMENT OF BIFURCATED AORTIC GRAFTS

Marco Minnetti, Marco Di Girolamo, Iacopo Carbone, Luciano Bresadola*
Dept. of Radiology - University of Rome "La Sapienza"
*Dept. of Emergency Surgery - University of Rome "La Sapienza"

PURPOSE: We performed a retrospective evaluation of the placement of endovascular bifurcate aortic grafts in patients with infrarenal aortic aneurysms.
MATERIALS AND METHODS: 7 patients (6 men and 1 woman) with infrarenal aortic aneurysms underwent repair by means of placement of endovascular bifurcate aortic grafts (Vanguard, Boston Scientific, USA). All the patients had type D aneurysms with the involvement of one or both the common iliac arteries but with a distance between the origin of the renal arteries and the proximal aneurysm's neck of at least 1 cm. The aortoiliac portion of the graft was placed within the right femoral artery in 6 cases and within the left femoral artery in 1 case. In 2 patients 3 supplemental intragraft extensive iliac stents (Passager, Boston Scientific, USA) were placed.
RESULTS: The endovascular bifurcate aortic grafts were successfully placed in all the patients. The procedure's time has been between 70 and 200 minutes. On the angiography performed at the end of the procedure, one patient presented a thrombosis of the right iliac and femoral artery treated by a Fogharty catheter while 2 patients had distal endoleak that needed the placement of 3 supplemental intragraft extensive iliac stents, bilateral in one case and monolateral in the other. One patient died 12 hours after the procedure for myocardial infarction. In the others 6 patients, Gadolinium-enhanced MR Angiography performed 3 months after the procedure showed the perfect patency of the grafts.
CONCLUSIONS: Placement of endovascular bifurcate aortic grafts to repair infrarenal aortic aneurysms can be proposed as an important alternative to standard open surgical repair, especially in operative high risk patients.

Preoperative portal embolization in major hepatic resections.Interventional radiology makes possible aggressive therapy of the hepatic metastasis.

Parisi A., Pasquale R., Lucchini R., Guerci L., Rozzi S.
Unità Malattie del Fegato e delle Vie Biliari, Azienda Ospedaliera"S. Maria" -Terni

Hepatic resection is the "gold standard"in the treatment of liver metastasis,also in the multiple localizations,with a five year survival about 20-30%.This implies the sacrifice of large portions of functioning parenchyma increasing the risk of postoperatory hepatic failure and the mortality.It is possible to overcome this problem with the preoperative embolization of the portal branch in the interested liver giving place to the compensatory hypertrophy in the residual hepatic parenchyma.From 1996,Januari,to 1998,December three patients were undergone to preoperative portal embolization.They are in the range of age between fifty and sxty-five.They presented in one case multiple metastasis from carcinoid tumor and in two cases metastasis from colorectal carcinoma.In all three cases the burden was right sided.All trhee patients were candidate to right hepatectomy but the left liver was too little in every case(<250 cc.).After the hepatic volumetric evaluation by spiral tc, right portal embolization under US guidance was performed trough the right anterior portal branch with ipsilateral approach in two patients and trough a controlateral approach in the last one.The embolization materials were Histoacril° and Lipiodol°.All three patients were undergone to right heparectomy and did uneventfully the postoperatory course.
Percutaneous transhepatic portal embolization(PTPE) reduces the risk of post-operatory liver failure in major hepatic resections in presence of small remnant liver(< 25%).The good results are linked to a correct waiting time until the surgical operation,to a right indication,to a right tecnique,to a safe approach.With concern to this aspect we must bear in mind the experience of the japanese authors Nimura ,Nagino and Kamyia that put emphasis on the ipsilateral puncture of the portal vein because this approach spares complications such hemobilia,arterioportal shunt formation,portal thrombosis in the lobe wich represents the remnant liver. At this regard, a new catheter device, devised by the same group,can facilitate a correct tecnique in PTPE. The puncture of the right anterior portal branch makes more easy the control of the catheter than the manipulation through the umbilical portion of left portal vein.

ILIAC ANEURYSMATIC RECIDIVES AFTER SURGERY FOR ABDOMINAL AORTIC ANEURYSM AND THEIR ENDOVASCULAR TREATMENT

A. Tozzi, I. Tuccimei, I. Podda, S. Curzi, C. Iovino, D. Bartoloni**, G. Scevola*
Unità Operativa di Chirurgia Vascolare; * Unità Operativa di Radiologia;
** Unità Operativa di Anestesia e Rianimazione
S. Filippo Neri Hospital, Rome - Italy

Introduction. The iliac aneurysmatic recidives after surgical resection of an aortic aneurysm are residual aneurysms, true recidives (or asynchronous aneurysms), and anastomotic pseudoaneurysms. They need to be treated early because of their high risk of rupture and its correlated high mortality rate. We report our experience about the endovascular treatment of some iliac aneurysmatic recidives.
Materials and methods. Among the follow-up of 149 patients submitted to surgical treatment of an abdominal aortic aneurysm we diagnosed, in four, some iliac recidives: three asynchronous hypogastric aneurysms, three residual aneurysms of the common iliac arteries, one iliac anastomotic pseudoaneurysm. Two patients had isolated recidives, the first one an asynchronous hypogastric aneurysm, the second one a residual aneurysm of the common iliac arteries. Two patients had multiple iliac recidives: a bilateral asynchronous hypogastric aneurysm associated with increment on size of a residual aneurysm of the common iliac aneurysm in one, an non infected iliac anastomotic pseudoaneurysm associated with a residual aneurysm of the controlateral common iliac artery in the second. All the recidives were asintomatic and diagnosed with instrumental examinations (Echodoppler, Angio T.C.).One residual aneurysm of the common iliac aneurysm was treated implanting an endoprosthesis wich we realised with a segment of PTFE posizioned on a Strecker stent, the other two were excluded with Passager endoprosthesis. The asynchronous hypogastric aneurysms were embolized by means of coils and the residual aneurysms of the common iliac arteries were excluded by Passager endoprosthesis. All the procedure were realised in operating room, with percoutaneous access to the vessels.
Results. Intraoperative angiography demonstrated the exclusion of all the aneurysms and of the pseudoaneurysm and the patency of the iliac vessels. There were no complications related to the procedure and all the patients were discharged in second postoperative day. Postoperative echodoppler at 1,3,6 and 12 months and angio T.C. at 12 months confirmed the sucess of all the procedures.
Discussion. The aneurysms of the iliac arteries must be early diagnosed and treated for their high risk of rupture and associated high mortality rate (1). Surgical access to the vessels is difficult for their position deep in the pelvis. In aneurysmatic recidives, fibrosis and adherences developed after the first intervention, may cause some lesions of the pelvic organs and vessels.
Conclusions. Endovascular procedures represents a valide alternative to conventional surgery in the treatment of the aneurysmatic recidives of the iliac arteries, with good results and without the risk related to the surgical access to the vessels. References: 1) Cardon JM et al:Endovascular repair of iliac artery aneurysm with endoprosistem I: a multicentric French Study, J Cardiovasc Surg 1996; 37(suppl 1 n.3):45

ENDOLUMINAL REPAIR FOR ABDOMINAL AORTIC ANEURYSMS: SHORT AND LONG TERM RESULTS WITH VANGUARD AND TALENT GRAFTS

A.Romagnoli, R.Gandini, F.Maspes, M.Pocek, Mr.Guazzaroni, G.Simonetti
Department of Radiology, "Tor Vergata" University, S.Eugenio Hospital, ASL Roma C, Rome, ITALY.

PURPOSE: to describe our experience in endoluminal repair of AAA using Talent and Vanguard bifurcated grafts.
MATERIAL AND METHODS: from October 1997 to January 1999 endovascular AAA treatment was performed in 20 male patients (age 63-84 years) for infrarenal abdominal aortic aneurysms and in one patient for an aorto-caval high flow fistula, using Vanguard bifurcated (18) and Talent grafts (3). The procedure was carried out under general (4), epidural (16) and local (1) anaesthesia after a 3 days of antibiotic profilaxis. Follow-up included clinical status,US and Spiral TC examination at 48 h,1,3,6 months and 1 year after the procedure.
RESULTS: all bifucated prosthesis were successful implanted in all patients. Technical success was achieved in 21 out of 21 patients (100%) without procedure related complications. No surgical correction were necessary. At the follow up 14 (70%) of the AAA showed a reduction in size, (about 1.4-10 mm) ,5 (25%) seems to be unchanged while in 1 patient (5%) the aneurysm increased in dimension (4 mm in 6 months). Complete aneurysm esclusion was achieved in 16/20 patients, while a no evidence of residual flow was observed in the patient treated for aorto-caval fistula. One major proximal and 3 minor distal leakage was noted in 4 patients during the follow-up controls. 2 minor leakage and the major one disappeared respectively at III, IV and VI months distance from the procedure while the last one is still appreciable at Spiral CT VI month control.In the patients with the aorto-caval fistula we achieved also the complete exclusion.
CONCLUSIONS: endovascular AAA repair is safe and effective if an accurate selection of AAA is performed before the procedure. According our experience two points should be emphatized: the availability of a surgical-radiological room and the availability of a straight cooperation with vascular surgeon and and anesthesiologist

EVALUATION WITH GADOLINUM-ENHANCED MR ANGIOGRAPHY IN RENAL TRANSPLANT DONORS

Luca POLI *, Carlo CATALANO **, Daniela PERITORE *, Aniello DI NICUOLO*, Antonio SPEZIALE*, Massimo ROSSI *

* Transplant unity university of Rome " LA SAPIENZA "
** Radiology Institute university of Rome " LA SAPIENZA "

The aim of this study was to determinate prospectively the feasibility and accurancy of gadolinum- enhanced magnetic resonance (MR) angiography in the pre-surgical evaluation of potential renal transplant donors detecting the the number and course of renal arteries, compared to conventional angiography.
Twenty donors for renal transplantation were evaluated with MR-imaging.The results were compared with seldinger technique angiography and surgical reperts.
150 conventional selecting angiography demonstrated single renal arteries in 248 kieneys and multiple renal arteries in 52 kidneys. A total of 40 renal artery were imaged in 20 patients with MR; this tecnique demonstrated multiple renal arteries in 5 of 6 cases with a sensitivity of 83% (in a case 3 arteries were demonstrated).
The overall accurancy of MR in identifying the number of renal arteries was 97,5% (39/ 40) .
Gadolinum - enhanced MR angiography is a reliable and accurate screening modality for the evaluation of renal arteries in potential renal donors as reliable as conventional angiography, reducing costs and the complications related to the procedure.

PERCUTANEOUS ULTRASOUND-GUIDED BIOPSY IN DIFFUSE LIVER DISEASE: OUR EXPERIENCE

Piero Rossi, Paolo Gentileschi, Giorgio Coscarella, Adriano de Majo, Flavio Demin, Silvia Canale, Pierpaolo Sileri, Marco Zoffoli, Giuseppe S. Sica, Achille L. Gaspari
Department of Surgery, University of Rome "Tor Vergata", Columbus Hospital Rome-Italy

Introduction: Percutaneous liver biopsy is a routine procedure in the diagnosis of diffuse hepatic diseases (1). The introduction and widespread use of ultrasounds (US) in medical practice have improved the percutaneous bioptic technique reducing postoperative (p.o.) complications (2). The Authors report their experience in percutaneous US-guided liver biopsy for diffuse diseases over a 4 year-period.
Materials and methods: From July 1994 to December 1998, 142 percutaneous US-guided biopsies were performed on 140 patients (mean age 47.7 ys.; range 18-85 ys.; 79 men, 61 women) at our Institution. Indication for percutaneous biopsy was, in all patients, the definition of a suspected chronic liver disease. Liver biopsies were performed with in-room US-guidance by anterior subcostal approach. Local anesthesia was used in all patients by means of lidocaine 2%, injected subcutaneously by a spinal needle (22 Gauge) under US-guidance and then continued toward the liver capsule. Liver specimen was obtained either by TRU-CUT needle or by SURE-CUT needle. Liver specimens were sent for histologic examination. We evaluated p.o. pain, modifications of blood pressure and red cell count, hospital stay, morbidity and mortality rates and adequacy of specimens for histologic examination.
Results: there was no operative mortality. As for major complications one case of hemobilia occurred. As for minor complications 2 cases of persistent p.o. pain required analgesic therapy. Patients were discharged the day following the procedure in all cases but two who were discarged on third and fifth p.o. day. Liver specimens were suitable for histologic diagnosis in all but one case, in which there were no portal spaces.
Discussion and conclusions: percutaneous US-guided liver biopsy for diffuse disease is a safe, comfortable and cost-effective procedure. We had only one case of hemobilia treated by arteriographic embolization. All specimens but one were suitable for hystologic diagnosis, thus confirming the importance of the procedure.
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Do associated iliac arteries aneurysm or occlusion affect the choice of endovascular management of abdominal aortic aneurysms?

I. Tuccimei *, A. Tozzi *, E. Serrao *, R. Ramacci *, G. Natali **, C. A. Monaco ***, F. Pastore ***
* Unità Operativa di Chirurgia Vascolare; ** Unità Operativa di Radiologia
*** Unità Operativa di Anestesia e Rianimazione
S. Filippo Neri Hospital, Rome - Italy

Introduction: Although the morbidity and mortality rates of standard abdominal aortic aneurysm (AAA) repair has proven to be excellent in good-risk patients, this rates increase with the presence of associated diseases. Endovascular treatment (ET) offers various advantages to high-risk patients Several anatomic criteria must be filled prior to attempting ET for AAAs and the procedure is generally contraindicated when these criteria are not fulfilled. Experience and technical improvements allow to extend indication to ET.
Methods: Between March1998 and December 1998, 106 patients had undergone repair of AAA by open technique (69) or by endoluminal methods (37) using a bifurcated modular stent-graft. Indication for ET in good-risk patients has been given on the basis of standard anatomic criteria, while in high-risk patients has been given also in presence of complex AAA anatomy. We studied such patients with iliac vessels complex anatomy and the techniques used to perform the procedure.
Results: In two cases of iliac vessels tortuosity asssociated with heavy calcified stenosis, arterial straightening manouvres did not allow to complete the procedure. 4 patients with iliac stenosis received intraoperative PTA; in 6 cases with associated common iliac arteries aneurysms (1 bilateral), distal limbs of the stent-grafts has been deployed in the external iliac artery with intraoperative internal iliac artery occlusion by embolisation. 2 patients with iliac occlusions has been managed by using an aorto-uni-iliac modified device and crossover graft (1) and by preliminary recanalization in 1 case with associated thrombosed iliac aneurysm.
No cases of mortality and procedure related complications has been observed during follow up (1 - 10 months).
Discussion: ET offers various advantages to high-risk patients: the absence of a laparotomy, significant period of aortic cross-clamping and general anesthesia reduce the phisiological stress. The proportion of AAA managed in this way can be increased by using associated endovascular procedures without morbidity and mortality rates increase.
Conclusions: Associated iliac arteries aneurysms or occlusion don't affect the choice of ET of AAA.
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ULTRAFLEX STENT: EXPERIENCE IN 43 CONSECUTIVE TIPS PROCEDURES.

G.Sodani, R.Gandini, F.Maspes, Mr.Guazzaroni, M.Pocek, G.Simonetti.

Department of Radiology, University "Tor Vergata", S.Eugenio hospital, ASL Roma C, Rome, Italy.

PURPOSE: to evaluate the efficacy of the Accuflex stent in the creation of transjugular intrahepatic portosystemic shunts (TIPS).

MATERIALS AND METHODS: between April 1994 and January 1999 the Accuflex stent was utilized in 49 consecutive patients out of 60 who underwent TIPS procedure in our department: 32 men and 17 women, aged 36-76 years (mean age 56 years). According to the Child-Pugh scoring system for hepatocellular disease, 4 were classified as A, 28 as B, and 17 as C.
In 3 cases TIPS was indicated as an emergency procedure for massive esophageal variceal hemorrhage. In the other 49 cases the indication was elective; all had recurrent esophageal variceal bleeding and 10 had both variceal bleeding and intractable ascites. All patients had hepatic cirrhosis, except 1 with Budd-Chiari syndrome.

RESULTS: Technical success was obtained in 49 patients. In 41 patients one prosthesis was used to create the shunt, in 7 patients two stents were utilized to achieve success and in 1 patient 3 stents were needed. In 2 cases stent dislodgement occurred during the procedure. Follow-up showed rebleeding in 5 cases, shunt stenosis in 12 cases and stent occlusion in 5. 9 patients developed hepatic encefalopathy (7 mild, 2 severe). The thirty-day mortality rate after TIPS was 12,2% (6 patients).

CONCLUSIONS: our experience suggests that Ultraflex stents may be effectively utilized for creating TIPS.

SCINTIGRAPHIC EVALUATION OF SWALLOWING AND LARYNGO-TRACHEO PULMONARY ASPIRATION POST HORIZONTAL SUPRAGLOTTIC LARYNGECTOMY

Valenza V., Galli J.°, D'Errico G., D'Alatri L., Reale F., Paludetti G.
Ist. di Medicina Nucleare, Università Cattolica, Policl. "A. Gemelli" - Roma

Introduction: Horizontal supraglottic laryngectomy (HLS) is a well-established functional surgical procedure which allows a radical oncologic surgery, along with an effective sparing of phonatory, respiratory and sphinteric laryngeal functions. However, normal respiratory and swallowing conditions may sometimes hardly recover after surgery. Dynamic oro-pharyngo-esophageal scintigraphy (OPES) was used as a complement to routine studies of upper aero-digestive pathways during deglutition. OPES is able to exactly calculate the transit times of various swallowing phases, to achieve a semi-quantitative assessment of bolus transit, and to evaluate the percentages of liquid which may be aspirated into the tracheo-bronchial tree or left in oral and/or pharyngeal cavities.

Materials and methods: 40 pts underwent OPES: 17 normal pts were ruled in this study as control group (group 1); 13 pts underwent HSL, with a satisfactory clinical recovery of swallowing, phonatory and respiratory functions (group 2); 6 pts underwent HSL with complained of aspiration and dyspnea: therefore, the tracheostomy tube was still in situ (group 3); 4 pts underwent total laryngectomy and ruled as control group (group 4). Opes is based on the rapid sequential acquisition of images (0.125" frames for a total 60" examination); the pts. stands in a 80° right anterior oblique position in front of a gamma-camera with a large field-high-resolution-low energy collimator, 10 cc of water containing 37 Mbq of ^{99m}Tc-S.C. is administered by a straw. The following parameters were evaluated: 1) oral transit time (OTT); 2) pharyngeal transit time (PTT); 3) pharyngeal retention index (PRI); 4) oesophageal transit time (ETT); aspiration percentage (AP).
The data obtained from the OPES were compared to clinical findings (CF) (dyspagia and tracheopulmonary aspiration symptoms) and videolaryn-goscopy (VLS) (scars, stenoses,oedema,hypomotility).
In the control group (group 1 and 4), the VLS examination and the OPES were all normal. In group 3 the concordance between the CF, OPES results and VLS was 100% (all alterated). In group 2 PRI (9/13 pts), PTT (5/13 pts) and AP (8/13 pts) parameters were slightly altererd; OPES seem able to pinpoint some residual "subclinic" alteration or minimal surgical sequelae, even though a satisfactory recovery is clinically achieved.

Conclusion: OPES appears to be sensitive in assessing the swallowing efficiency post HSL.

ULTRASOUND-GUIDED CORE BREAST BIOPSY IN NON PALPABLE MAMMARY LESIONS

Pietro Giorgio Calò, Valeria Pollino, Carlo Cabula, Armando Malloci, Bruno Massidda, Angelo Nicolosi

Università degli Studi di Cagliari, Istituto di Chirurgia e Oncologia Clinica c/o Ospedale Oncologico Regionale "A. Businco"

Introduction. In the last years the diffusion of mammography and ultrasonography in diagnostic and screening programmes has carried to the observation of a great number of non palpable mammary lesions. Purpose of this study is to evaluate the utility of ultrasound-guided core breast biopsy in the diagnosis of non palpable mammary lesions.

Methods. From september 1997 to december 1998 percutaneous needle core biopsy of 33 solid and/or indeterminate breast lesions visualized with ultrasound was performed in 30 patients by using a long throw biopsy gun with 14, 16 or 18 G needles. A free hand technique was used. The mean age of patients was 53 years (median 52.5), range 31-80 years. Mean size of lesions was 1 cm (range 0.6-2 cm). A minimal number of 3 specimens was obtained.

Results. Histological diagnosis was infiltrating ductal carcinoma in 4 cases, intraductal carcinoma in 1 case, fibroadenoma in 1 case, fibrocystic changes in 26 cases, fibrocystic changes with atypical hyperplasia in 2 cases. In patients with diagnosis of infiltrating or intraductal carcinoma conservative surgery was performed confirming needle-core diagnosis. In the other cases an open surgical biopsy was performed to confirm the diagnosis. In 2 cases with diagnosis of fibrocystic changes an infiltrating ductal carcinoma was present. Agreement between needle-core and surgical diagnoses was 94%. No false-positive results were seen. There were no significant complications.

Discussion and conclusions. Core needle biopsy is a short, safe and inexpensive method for the diagnosis of non-palpable breast lesions. Since ultrasound guidance is faster, uses no ionizing radiation and causes less patient discomfort, we prefer to use ultrasound guidance rather than mammography for lesions seen with both modalities. However some cases of false-negative diagnosis were noted in our experience and in the literature. For all these reasons, in high suspicious lesions, even if core needle diagnosis is of benignity, an open surgical biopsy is necessary to confirm the diagnosis. The use of new techniques in diagnosis of non palpable lesions (ABBI, Mammotome and so on) can further improve these results.